

### ABSTRACT

To remarkably improve shape-memory properties without the need for strictly controlling the composition, the present invention provides a Ti-Ni-based shape-memory alloy having a titanium content within a range of from 50 to 55 atomic %, which comprises an amorphous alloy heat-treated at a temperature of from 600 to 800 K, in which subnanometric precipitates generating coherent elastic strains are formed and distributed in the bcc parent phase(B2).